Michigan's Statewide *E. coli* Total Maximum Daily Load

What is E. coli?

Escherichia coli, or *E. coli,* is a bacteria found in the digestive systems of mammals. Michigan uses the presence of *E. coli* in surface water as an indicator of pollution by feces. *E. coli* can be dangerous, but it also indicates the potential for other pathogens that can make people sick, such as giardia and cholera.

Why is E. coli Important?

The safety of Michigan's people and visitors is a DEQ priority. *E. coli*, and associated pathogens, can make you sick if ingested.

What is a TMDL?

The Federal Clean Water Act requires that Michigan monitor surface water to determine if the water quality standards are being met. If the *E. coli* levels in a water body exceed the standard, then Michigan must develop a plan to limit pollution with a goal of meeting the standard. This plan is a document known as a Total Maximum Daily Load (TMDL). TMDLs are the necessary first step in solving *E. coli* pollution problems.

A Statewide Approach to a Statewide Problem

The Department of Environmental Quality (DEQ) estimates that about half of Michigan's river miles are impaired by *E. coli*, and about 22% of beaches had closures due to *E. coli* contamination in 2014. *E. coli* is used as an indicator for fecal contamination and the water quality standard is designed to protect human health during recreation. When the water quality standard is exceeded, the Federal Clean Water Act requires that Michigan develop a Total Maximum Daily Load (TMDL) to provide a framework for restoration of water quality. Given the extent of this problem, and the multitude of potential sources, a statewide approach will be more effective and more efficient at addressing this issue. This webinar will discuss why the DEQ has decided to take a statewide approach, what the statewide TMDL will include, and how it will be updated as well as provide background information on the TMDL process and potential *E. coli* sources. This webinar will interest general public, watershed groups, municipalities, Tribes, and National Pollutant Discharge Elimination System (NPDES) permittees.

The benefits of a statewide approach

- Implement needed pollutant reductions through permits significantly faster
- Free-up resources to increase ambient *E. coli* monitoring
- Focus resources on priority areas where we can make an impact

How will this help you?

- A new online interactive mapping system will give you important, up-to-date information about potential *E. coli* sources in your area
- The TMDL will be more interactive than previous versions, with links to online resources, so it won't become obsolete.

Some details on what to expect

- The TMDL will provide a general legal framework for reducing pollutant loads in areas where the water quality standard is exceeded
- Only impaired waters will be included
- As new impaired waters are found, they will be added to the TMDL
- New additions will be public noticed with each biennial update of the 303(d)
- Integrated Report and data used to make impairment decisions will be available to the public

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Upcoming Webinar

January 19, 2016 at 10:00 AM EST

***E. coli* in Surface Waters: Michigan's Statewide Bacterial Total Maximum Daily Load (TMDL)**

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